

Amendments to the Claims:

This listing of claims replaces all prior listings, and versions, of claims in the application:

Listing of Claims:

- 1.(Currently amended) A method of controlling the transmit power of a forward link signal between a base station and a mobile device in a communications network, said method comprising the steps of:
 - sending a first signal from the basestation to the mobile device, said first signal having a first signal transmit power;
 - receiving said first signal at the mobile device;
 - measuring said first signal for a received signal to noise ratio at the mobile device;
 - sending a second signal from the mobile device to the basestation, said second signal containing information about said received signal to noise ratio; and
 - setting the transmit power of the forward link signal based on said received signal to noise ratio information and said first signal transmit power, said setting step including:
 - estimating a signal component value based on said received signal to noise ratio;
 - calculating the difference between a desired signal component value and said estimated signal component value; and
 - assigning the transmit power of said forward link signal to a value obtained by offsetting said first signal transmit power by the difference found in said calculation step,

wherein the first signal is a preamble that is sent during the traffic channel initialization period in a CDMA network.
2. (Cancelled)
3. (Original) The method of claim 1, wherein said forward link signal is a preamble sent from said basestation to said mobile device.

4. (Original) The method of claim 1, wherein said first signal is a pilot signal.
5. (Original) The method of claim 1, wherein the step of sending said second signal is performed over an access channel in the communications network.
6. (Original) The method of claim 1, wherein said desired signal component value is a pre-optimized preamble E_c/I_o value.
7. (Currently amended) The method of claim 1, wherein the ~~desired signal component value is determined based on said mobile device~~ the transmit power assigned to said forward link signal, is assigned independently of the basestation's transmission data rate.
8. (Currently amended) The method of claim [[7]] 1, wherein the desired signal component value is reported to said basestation during said sending said second signal step.
9. (Currently amended) The method of claim [[7]] 1, wherein the desired signal component value is limited by a threshold value, whereby if said value based on said mobile device exceeds said threshold value, said desired signal component value is set to said threshold value.
10. (Original) The method of claim 1, wherein the desired signal component value is selected from a predetermined value at said basestation and a value received from said mobile device.
11. (Original) The method of claim 10, wherein said selecting is performed based on the higher value between said predetermined value at said basestation and said value received from said mobile device.

12. (Original) The method of claim 11, wherein said selecting is limited by a threshold value, whereby if said value received from said mobile device exceeds said threshold value, said selecting step uses said threshold value.

13. (Original) The method of claim 1, wherein said setting step further includes adding an offset value to the transmit power of said forward link signal.

14. (Original) The method of claim 13, wherein said offset is between 0 and 6 dB.

15. (Original) The method of claim 1, wherein said estimated signal component value is an estimated E_c/I_o value of said first signal.

16. (Original) The method of claim 1, wherein said communications network is a CDMA network.

17. (Currently amended) A system for controlling transmit power of a forward link signal in a communications network, said system comprising:

a mobile device, said mobile device adapted to:

receive a first signal from a basestation;

evaluate a signal to noise ratio of said first signal; and

transmit information about said received signal to noise ratio to said basestation;

and

~~said a~~ basestation, said basestation being adapted to:

send said first signal with a first signal transmit power;

receive said information about the received signal to noise ratio from said mobile device; and

set the transmit power of said forward link signal based on said information about said received signal to noise ratio and said first signal transmit power, said setting of the transmit power in said basestation including:

estimating a value of a signal component of said first signal based on said information about the received signal to noise ratio;
determining a desired value for said signal component; and
setting the transmit power of said forward link signal by adding the difference between the desired signal component value and the estimated signal component value to the first signal transmit power; and
wherein the first signal is a preamble, sent during the traffic channel initialization period in a CDMA network.

18. (Original) The system of claim 17, wherein said first signal is a pilot signal.

19. (Original) The system of claim 17, wherein said transmitting of information from said mobile device is performed over an access channel.

20. (Currently amended) The system of claim 17, wherein said ~~forward link signal is a~~ preamble is sent on a traffic channel sent from said basestation to said mobile device.

21. (Cancelled)

22. (Original) The system of claim 17 wherein said evaluating of said first signal in said mobile device is performed on a first signal component.

23. (Original) The system of claim 22, wherein the first signal component is the E_c/I_o of the first signal.

24. (Original) The system of claim 17, wherein said determining said desired signal component value is based on a pre-optimized preamble E_c/I_o value.

25. (Original) The system of claim 17, wherein said determining said desired signal component value is based on said mobile device.

26. (Original) The system of claim 25, wherein said desired signal component value is reported to said basestation during said transmitting of information step.

27. (Original) The system of claim 25, wherein the desired signal component value is limited by a threshold value, whereby if said value based on said mobile device exceeds said threshold value, said desired signal component value is set to said threshold value.

28. (Original) The system of claim 17, wherein the desired signal component value is selected from a predetermined value at said basestation and a value received from said mobile device.

29. (Original) The system of claim 28, wherein said selecting is performed based on the higher value between said predetermined value at said basestation and said value received from said mobile device.

30. (Original) The system of claim 29, wherein said selecting is limited by a threshold value, whereby if said value received from said mobile device exceeds said threshold value, said selecting step uses said threshold value.

31. (Original) The system of claim 17 wherein said setting further includes adding an offset parameter to the transmit power of said forward link signal.

32. (Original) The system of claim 31, wherein the value of the offset parameter is between 0 and 6 dB.

35. (Cancelled)

36. (New) A base station for a CDMA communications network, said base station comprising:

- a transmitter; and

- a receiver operatively coupled to the transmitter;

- wherein said transmitter is adapted to transmit a first preamble signal at a first transmit power level, only during the traffic channel initialization period in a CDMA network;

- wherein said receiver is adapted to receive a signal sent back from a mobile device after the first preamble signal is sent, said signal received from a mobile device containing information that represents a signal to noise ratio of said first preamble signal received by said mobile device;

- wherein after said base station receives said signal to noise ratio, said base station sets the transmitter transmit power of a forward link signal by the steps of:

 - estimating a value of a signal component of said first signal based on information about the received signal to noise ratio;

 - determining a desired value for said signal component; and

 - adding or subtracting a difference between the desired signal component value and the estimated signal component value to the first signal transmit power, said transmitter setting the transmit power of the forward link signal independently of a transmission rate of the base station.

37. (New) A mobile device for a CDMA communications network, said mobile device comprising:

- a transmitter; and

- a receiver operatively coupled to the transmitter;

- wherein said receiver is adapted to receive a first preamble signal sent by a base station at a first power level, only during a traffic channel initialization period in a CDMA network;

- wherein said mobile device transmitter sends a signal back to the base station after receiving the first preamble signal, said signal sent back to the base station containing information that represents a signal to noise ratio of said first preamble signal received by the receiver of said mobile device;

- wherein the signal sent back to the base station causes the base station to set a transmitter transmit power of a forward link signal by the steps of:

- estimating a value of a signal component of said first signal based on information about the received signal to noise ratio;

- determining a desired value for said signal component; and

- adding or subtracting the difference between the desired signal component value and the estimated signal component value to the first signal transmit power, said transmitter setting the transmit power of the forward link signal independently of a transmission rate of the base station.